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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/995,655

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Robert J. Meyer

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11/08/2002

Patent Documentation Center

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EXAMINER

BRASE, SANDRA L

ART UNIT

PAPER NUMBER

2852

DATE MAILED: 11/08/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/995,655

Applicant(s)

MEYER ET AL. 

Examiner

Sandra L. Brase

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2. 6) ☐ Other: _____

DETAILED ACTION

Information Disclosure Statement

1. The pending cited U.S. applications on the Information Disclosure Statement filed 11/29/01 have not been considered since Applicant has not complied with 37 CFR 1.98 in regard to these cited U.S. applications. For each cited pending U.S. application, 37 CFR 1.98 requires a legible copy of the application specification including the claims and any drawing of the application, or that portion of the application which caused it to be listed including any claims directed to that portion. Furthermore, 37 CFR 1.98 requires that each U.S. application listed in an information disclosure statement must be identified by the inventor, application and filing date.

Specification

2. The abstract of the disclosure is objected to because on line 10, "a trim bars" is confusing, where it should be changed to "a trim bar". Correction is required. See MPEP § 608.01(b).

3. The disclosure is objected to because of the following informalities.

On page 1, lines 7, 10, 12, 15 and 17, the appropriate U.S. Serial Number needs to be provided.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

On line 11 of claim 1, “a trim bars” is confusing and unclear, the language could be changed to “a trim bar”.

On line 11 of claim 1, “said donor roll” lacks proper antecedent basis.

On line 12, of claim 1, “said trim bar” lacks proper antecedent basis.

On line 13, of claim 1, “the developer bed” lacks proper antecedent basis.

On line 15 of claim 1, “the development nip”.

Claims 5 and 6 each contain more than one sentence, where a claim must be only one sentence long; therefore, it is unclear as to what is to be included in the limitations of each of these claims.

On line 2 of claim 5, “said plurality of trim bars” lacks proper antecedent basis.

On line 3 of claim 5, the language “may be” is considered to be indefinite.

In claim 6, it is unclear as to whether or not the disclosed carrier bead is contained in the claimed development system.

It is unclear as to what Applicant intended to claim in claim 19, where the variables “X” and “Y” are not defined.

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Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 1, 2, 6-8 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ojima et al. (US 5,519,472) in view of Yamashita (US ⁴⁵⁹⁷⁶⁶¹~~5,519,472~~).

Ojima et al. (...472) disclose a development system comprising: a housing (7) defining a chamber storing a supply of developer material (figure 1); a donor member, mounted partially in the chamber and spaced from an imaging surface (2), for transporting developer on an outer surface thereof to a region opposed from the imaging surface (figure 1), where the donor member has a magnetic assembly (18) having a plurality of poles, a sleeve (8) enclosing the magnetic assembly, rotating about the magnetic assembly (figure 2); and a trim bar (26) at a predetermined position spaced from the donor member, where the trim bar includes a vibrating member for disrupting a developer bed and reducing the developer bed height of the developer material on

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the donor member to a predefined developer bed height (col. 3, lines 43-54 and col. 5, lines 1-17; col. 5, lines 55-63; col. 6, lines 20-27; and col. 8, lines 28-52). The trim bar is fastened to the wall of the development housing (col. 5, lines 1-3). The predefined developer bed height is 10-100 μm (col. 14, lines 13-15). A means (19) applies an oscillating electric field between the donor member and the imaging surface (col. 5, lines 19-36; and col. 7, line 64 – col. 8, line 4). The vibrating member vibrates at 1800 Hz (col. 5, line 36). However, Ojima et al. (...472) do not disclose the developer material comprising the claimed carrier and toner and the rpm of the donor member. Yamashita (...661) discloses a developer material in a magnetic development system can be a one-component developer or a two-component developer, where a two-component developer includes a carrier and a toner (col. 1, lines 38-50). The carrier can be iron or ferrite (col. 1, lines 41-44). The donor member in the development system is rotated at 200 rpm (col. 5, lines 20-21). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the developer material be a two-component developer with the claimed carrier and toner since such a developer material is notoriously well known in the art, as disclosed by Yamashita (...661), and it would have also been obvious to rotate the donor member at the claimed rpm since such a rotating speed for a donor member in a developing operation is well known in the art, as disclosed by Yamashita (...661).

9. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ojima et al. (US 5,519,472) in view of Yamashita (US 4,597,661) as applied to claim 1 above, and further in view of Hirata et al. (US 5,532,804).

Ojima et al. (...472) in view of Yamashita (...661) disclose the features mentioned previously, but do not disclose the pole spacing of the magnetic assembly. Hirata et al. (...804) disclose a development system including a magnetic assembly with a pole spacing of 1-10 mm (col. 13, lines 23-35). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have a pole spacing in the claimed range so as to transport a sufficient amount of developer material during the developing operation, as disclosed by Hirata et al. (...804).

10. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ojima et al. (US 5,519,472) in view of Yamashita (US 4,597,661) and Hirata et al. (US 5,532,804) as applied to claim 3 above, and further in view of Tajima et al. (US 4,936,249).

Ojima et al. (...472) in view of Yamashita (...661) and Hirata et al. (...804) disclose the features mentioned previously, but do not disclose the thickness of the sleeve. Tajima et al. (...249) disclose a development system with a sleeve (2), which encloses a magnetic assembly, having a thickness of 0.25 – 1.5 mm (col. 4, lines 64-65). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the claimed sleeve thickness since it is well known in the art for a sleeve in a development system to have such a thickness, as disclosed by Tajima et al. (...249).

11. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ojima et al. (US 5,519,472) in view of Yamashita (US 4,597,661) as applied to claim 5 above, and further in view of Hosono et al. (US Re. 34,724).

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Ojima et al. (...472) in view of Yamashita (...661) disclose the features mentioned previously, but do not disclose a plurality of trim bars. Hosono et al. (...724) disclose a development system including a plurality of trim bars (24 and 25). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have a plurality of trim bars since it is well known in the art to use a plurality of trim bars to achieve the desired height of developing material for development, as disclosed by Hosono et al. (...724).

Prior Art

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kumasaka et al. (US 4,947,200), Ohzeki et al. (US 5,570,166) and Yamaguchi et al. (US 5,682,585) disclose a development system including a donor member and a trim bar.

Yasuda et al. (US 5,532,803) disclose a development system including a donor member, which rotates in the range of 200-400 rpm, and a trim bar.

Contacts \ Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sandra L. Brase whose telephone number is (703) 308-0725.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Arthur T. Grimley, can be reached on (703) 308-1373. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-3431 or 305-3432.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.



Sandra L. Brase
Primary Examiner
Art Unit 2852

November 5, 2002